

IN THE CLAIMS:

The text of all pending claims, (including withdrawn claims) is set forth below. Cancelled and not entered claims are indicated with claim number and status only. The claims as listed below show added text with underlining and deleted text with ~~striketrough~~. The status of each claim is indicated with one of (original), (currently amended), (cancelled), (withdrawn), (new), (previously presented), or (not entered).

Please AMEND claims 1, 6, 14, 19 and 20 in accordance with the following:

1. (Currently Amended) A method of controlling a computer having a plurality of memory buses operating according to a multi-channel mode, comprising:
 reading memory information of at least two memory modules selected from a plurality of memory modules connected to the respective memory buses; and
 displaying whether the plurality of the memory buses operate in the multi-channel mode by comparing the read memory information of a first memory module of a first channel to the read memory information of at least a second memory module of at least a second channel to make a determination as to whether characteristics of the first memory module of the first channel are compatible with characteristics of at least one of the memory modules of the second channel such that the memory buses can operate in the multi-channel mode.
2. (Original) The method of claim 1, wherein the read memory information comprises serial presence detect (SPD) data stored in the respective memory modules.
3. (Original) The method of claim 2, wherein the SPD data comprises memory capacity information of the respective memory modules.
4. (Original) The method of claim 1, further comprising examining an existence of an arrangement of the memory modules connected to the plurality of the memory buses that allows the plurality of the memory buses to operate in the multi-channel mode, when the comparing determines that the plurality of the memory buses do not operate in the multi-channel mode.
5. (Original) The method of claim 4, wherein the displaying whether the plurality of the memory buses operate in the multi-channel mode further comprises displaying the arrangement of the memory modules allowing the plurality of the memory buses to operate in the multi-channel mode.

6. (Currently Amended) A computer having a plurality of memory buses operating in a multi-channel mode, comprising:

a controller determining whether the plurality of the memory buses operate in the multi-channel mode by comparing memory information of at least one of a plurality of memory modules of a first channel to at least one of a plurality of memory modules of at least a second channel, the memory modules being connected to the respective memory buses, to make a determination as to whether characteristics of at least one of the memory modules of the first channel are compatible with characteristics of at least one of the memory modules of the second channel such that the memory buses can operate in the multi-channel mode; and

an output unit providing information about whether the plurality of memory buses operate in the multi-channel mode according to the determination by the controller.

7. (Original) The computer according to claim 6, wherein the memory information of the memory modules connected to the respective memory buses comprises serial presence detect (SPD) data stored in the respective memory modules.

8. (Original) The computer according to claim 7, wherein the SPD data comprises memory capacity information of the respective memory modules.

9. (Original) The computer according to 6, wherein the controller examines an existence of an arrangement of the memory modules connected to the plurality of the memory buses that allows the plurality of the memory buses to operate in the multi-channel mode, when the controller determines that the plurality of the memory buses do not operate in the multi-channel mode.

10. (Original) The computer according to claim 9, wherein the output unit visually informs the arrangement of the memory modules allowing the plurality of the memory buses to operate in the multi-channel mode.

11. (Original) The computer according to claim 10, wherein the controller is a determining program determining whether the plurality of the memory buses operate in the multi-channel mode.

12. (Original) The computer according to claim 11, wherein the determining program is stored in a BIOS ROM.

13. (Original) The computer according to claim 10, wherein the output unit comprises a monitor to display information about the arrangement.

14. (Currently Amended) A computer readable storage controlling a computer according to a stored process of:

reading memory information of at least one of a plurality of channeled memory modules of a first channel and at least one of a plurality of memory modules of at least a second channel, the memory modules being connected to respective memory buses;

comparing the read memory information of at least one of the memory modules of the first channel to the read memory information of at least one of the memory modules of at least the second channel to make a determination as to whether characteristics of at least one of the memory modules of the first channel are compatible with characteristics of at least one of the memory modules of the second channel such that the memory buses can operate in the multi-channel mode; and

outputting multi-channel mode information about whether the plurality of memory buses operate in the multi-channel mode ~~of the memory buses~~ based upon the comparing.

15. (Original) The computer readable storage of claim 14, wherein the memory information comprises manufacturer information, device structure and logical bank information, type information and capacity information.

16. (Previously Presented) The computer readable storage of claim 14, wherein the comparing comprises comparing memory capacities of the channeled memory modules of the first channel to at least one of the channeled memory modules of at least the second channel to determine if same memory capacity memory modules are separately connected to each memory bus, respectively.

17. (Original) The computer of claim 6, further comprising:
a BIOS ROM performing a power on self test (POST) during booting of the computer,
and
wherein the controller is software stored in the BIOS ROM and determining the multi-

channel mode memory bus operation during the POST.

18. (Original) The computer of claim 17, further comprising:

a north bridge controlling the plurality of the memory modules, wherein the controller controls the north bridge to read the memory information during the POST.

19. (Currently Amended) A method, comprising:

outputting multi-channel mode memory bus information based upon memory information of channeled memory modules of a first channel and at least a second channel, the multi-channel mode memory bus information being determined by comparing at least one memory module of the first channel and at least one memory module of at least a second channel, the memory modules being connected to respective memory buses, to make a determination as to whether characteristics of at least one of the memory modules of the first channel are compatible with characteristics of at least one of the memory modules of the second channel such that the memory buses can operate in the multi-channel mode.

20. (Currently Amended) A method of determining a multi-channel mode memory bus operation of a computer having a plurality of memory buses connected to corresponding channeled memory modules, the method comprising:

executing a program to determine the multi-channel mode memory bus operation during a power on self test, the program controlling the computer according to a process of:

reading memory information of at least two memory modules selected from the channeled memory modules connected to the memory buses respectively;

comparing the read memory information of a first memory module of a first channel to the read information of at least a second memory module of at least a second channel to make a determination as to whether characteristics of the first memory module of the first channel are compatible with characteristics of at least one of the memory modules of the second channel such that the memory buses can operate in the multi-channel mode; and

displaying whether the memory buses operate in the multi-channel mode according to the comparing of the read memory information; and

displaying an arrangement of the memory modules allowing the multi-channel mode memory bus operation.